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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,321	06/29/2001	Preston J. Hunt	42390P11147	8383

<sup>7590</sup> <sup>07/31/2007</sup>  
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Los Angeles, CA 90025-1026

EXAMINER

POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
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2134

MAIL DATE	DELIVERY MODE
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07/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/896,321

Applicant(s)

HUNT ET AL.

Examiner

Peter Poltorak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,10,12,20 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 7, 10, 12, 20 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/05/07 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

***Response to Amendment***

3. Applicant amendments addressed the 35 USC § 112 rejections cited in the previous Office Action that, as a result, has been withdrawn.
4. Applicant's arguments are directed towards the newly introduced limitations. These arguments/new limitations are explicitly addressed in this Office Action, below.
5. Claims 1-2, 7, 10, 12, 20 and 29-32 have been examined.

***Claim Rejections - 35 USC § 112***

6. Claim 1-2, 7, 10, 12, 20 and 29-32 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

It appears that the limitations: "...generating client message digest ... by performing a cryptographic hash of the contents... the performing of the cryptographic hash of

the contents including generating a unique fingerprint identifying the contents of each client file.." recited in claims 1, 10 and 20 are unnecessarily confusing. The examiner reads the limitation (similarly to applicant disclosure, e.g. paragraph 27) as underlining the fact that a message digest is a unique fingerprint derived by applying a cryptographic hash. The examiner suggests simplifying the sentence or, in the event that the examiner's understanding of the limitation was not correct, rewriting the limitation to clarify the intended meaning.

7. Additionally, the term "cataloging the client files" as recited in the claims 1, 10 and 20 is not clear. Based on applicant disclosed Fig. 2 with associated text (paragraph 26) the examiner reads "cataloging the client files" as a process of combining message digests corresponding to client files into a single message digest.

#### ***Claim Rejections - 35 USC 103***

8. Claims 1-2, 7, 10, 12, 20 and 29-32 are rejected under 35 U.S.C. 103(a) as obvious over Midgely (U.S. Patent No. 6571245) in view of Margolus (U.S. Pub. No. 20040143743), and further in view of Chan (U.S. Patent No. 6748538) or alternatively in further view of Bolosky (U.S. Pub. No. 20020194484).  
As per claims 1, 7 and 12, Midgely discloses a network synchronization of a client/server files (Fig. 8 and col. 11 line 62-col. 12 line 9).
9. Midgely does not disclose generation of client message digests and server message digest corresponding to client and server file contents respectively and as a result,

Furthermore, Midgely does not disclose synchronizing the client files and the server files if the client file contents and the server file contents do not match.

Margolus teaches generating, prior to synchronization, client message digests corresponding to client files, and generating client message digests corresponding to server files and using the message digests to determine whether to synchronize a client and a server (Margolus, [6-7]). In particular, Margolus discloses the benefit of matching client file content and server client content using message digest to avoid synchronizing the client files and the server files if the client file content and the serve file content match (Margolus, [7]).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include generating, prior to synchronization, client message digests corresponding to client files, and generating client message digests corresponding to server files and using the message digests to determine whether to synchronize a client and a server as disclosed by Margolus. One of ordinary skill in the art would have been motivated to perform such a modification in order to avoid unnecessary transmission and duplicate-storage of files.

Since introducing Margolus' invention would alleviate only the problem of transfer duplicate client/server files, synchronizing the client files and the server files, if the client files contents and the server file contents do not match would be necessary in order to successfully accomplish client/server file synchronization taught by Huang.

10. As per newly introduced limitations, Margolus a message digest corresponding to a file uniquely identifies the file and reads on (as described by Margolus in [6], for

example) a unique fingerprint identifying. Margolus also discloses that generating a client message digest of each file comprises implementing a cryptographic hash (MD4 Message Digest Algorithm example disclosed by Margolus in [6] or 128-160 bits SHA-1 in [59]) of the contents of the client file. Lastly, generating client message digests by a client (as disclosed by Marglous in [7]) inherently involves storing the client message digests on the client (see also Menezes pg. 33 and 348).

11. Midgely in view of Margolus do not disclose combining the message digests into a single message digest.

Chan teaches combining the message digests into a single client message digest (Chan, col. 3 line 45- col. 4 line 7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine message digests into a single message given the benefit of ensuring the integrity of the message digests.

Similarly, Bolosky discloses combining the message digests into a single client message digests (manifest, Bolosky, [7]).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine message digests into a single message given the benefit of a increased efficiency of evaluating multiple digests.

12. Combining the message digests into a single client message digest reads on cataloging the client files.

13. As per claim 2, the ordinary artisan would recognize that new files are frequently created on client (and a server) and, as a result, it would have been obvious to one

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of ordinary skill in the art at the time of applicant's invention to add client file contents that are missing on the server to the server given the benefit of including new files in synchronization process.


14. Claims 10, 20 and 29-32 are substantially equivalent to claims 1-2 and 7; therefore claim 10, 20 and 29-32 are similarly rejected.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
7/23/07

  
KAMBIZ ZAND  
SUPERVISORY PATENT EXAMINER